

Adaptive Management & Water Quality Trading

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Similarities between AM and WQT

- * Voluntary compliance options for WPDES permit holders to comply with phosphorus requirements
- * Options will be used when it is economically preferable to control nonpoint sources or other point sources of P
- * Both require nonpoint and/or other point source reductions
 - * Contractual agreements should be made
 - * Need to look in same watershed (HUC 12)



Adaptive Management Overview

- * Goal: Meet Water Quality Criteria
- * Must meet eligibility requirements
- * Develop an AM plan
 - * Identify where reductions will occur
 - * Identify partners
 - * Describe and quantify management measures
- * Determine success
 - * BMP success
 - * WQ improvement
 - * Modeling and/or monitoring

Eligibility Requirements

1. Receiving water exceeding the WQC
2. NPS contribute >50% of P load or NPS must be controlled
3. Filtration or equivalent technology required to meet WQBEL

What is Included in an AM Permit?

- * Interim limits
- * Compliance Schedules for interim limits/WQBEL
- * Actions proposed in AM plan
- * Monitoring Requirements
 - * In-stream & effluent
- * Annual reporting
 - * Implementation status
 - * Monitoring results
 - * Management updates
 - * Modifications to the plan

Permit
term 1

• 0.6 mg/L

Permit
term 2

• 0.5 mg/L

Permit
term 3

• Revised
WQBEL

Water Quality Trading Overview

- * Goal: Offset Pollutant Load
- * Can trade PS to PS or PS to NPS
- * Must result in an improvement in water quality and net reduction of pollutant (minimum trade ratio)
- * Must manage uncertainty (trade ratios)

Quantifying Credits

- * Credits Generated by a Nonpoint Source

- * SNAP-Plus and RUSLE2 for agricultural field practices
- * SLAMM and P-8 for urban practices

- * Credits Generated by a Point Source

- * Effluent monitoring

Timing of Credit Generation and Use

- * Credits must be generated before they are used
 - * Point source pollutant reduction must be measurable
 - * BMP in-place and effective
- * Credit use timing depends on credit source
 - * Point source – Averaging period of limit
 - * Nonpoint – Anytime during calendar year
(highly variable discharge exception)

Compliance and Enforcement

Credit User's WPDES Permit

- * Language Allowing Use of Credits
- * Application Submittal Requirement
- * Effluent Limit when Trading (e.g. TBEL)
- * Reporting Requirements for Credits Used
- * Management Practice Certification
- * Annual Inspection of Management Practice



Compliance and Enforcement

Trade Agreement

- * Submitted by permittee (credit user) for Department approval
- * Identifies credit generator
- * Identifies credit generation method (e.g., management practice)
- * Provides site location where credits are generated
- * Provides amount of credits that will be generated
- * Provides date when credits become available
- * Provides trade ratio for each site and practice.

Differences

	Adaptive Management	Trading
Pollutants Covered	TP (and possibly TSS)	All pollutants except BCCs
End Goals	Attaining the water quality criteria	Offsetting the limit
Implementation Area	Watershed-focused	Upstream-focused
Offsets	No trade ratios	Trade ratios apply
Timing	Implemented throughout the permit term	Generating credits before they can be used
In-Stream Monitoring	Required	Not required
Level of Documentation Needed	General watershed information	Field-by-field documentation

What can AM get you that trading can't?

- * Time

- * Don't have to generate credits before they can be used
- * Have one permit term to get good, two to get great, and three to get to criteria

- * Flexibility

- * Can adjust plans as you gain more experience
- * Flexible action area
- * Flexibility in quantifying offset requirements and interim success
- * Can always switch to a different option if AM doesn't work, including trading

- * Potentially fewer offsets required

- * Trade ratios, delivery ratios, credit thresholds not required

What can trading get you that AM can't?

- * Certainty
 - * “Easy as 1, 2, 3”- calculate the offset, do the offset, and meet your limit
 - * Do not need to meet criteria
- * Potential pollutants
 - * Can look at both TSS and P trades
- * Experience
 - * Trading has already been done in Wisconsin and in other states

Information is Available



- Phosphorus webinars
 - * Adaptive management
 - * Water quality trading
 - * Compliance schedules
 - * Phosphorus limits
- Phosphorus implementation guidance
- Adaptive management handbook
- Trading How-To Manual

*Visit <http://dnr.wi.gov/>, search
“**phosphorus rule**”*

Questions?

